



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0188; Directorate Identifier 2013-NM-157-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This proposed AD was prompted by reports of two in-service incidents where one side of the main landing gear (MLG) did not achieve down-lock. This proposed AD would require a detailed inspection of the apex joints of the stabilizer brace lock link in the MLG for clearance; rectifying and repairing the clearance gap, if necessary; and lubricating the apex joints of the stabilizer brace lock link in the MLG. We are proposing this AD to detect and correct insufficiently greased stabilizer brace lock linkage of the MLG and over-torqued lock linkage attachment bolts, which could lead to the failure to extend and down-lock the MLG, and could affect the safe landing of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0188; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Luke Walker, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7363; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0188; Directorate Identifier 2013-NM-157-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The Transport Canada Civil Aviation, which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-19, dated July 18, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

There have been two reported in-service incidents where one side of the main landing gear (MLG) did not achieve down-lock resulting in a gear unsafe indication. In both cases, the MLG was ultimately extended and down-lock was achieved through the use of the alternate extension system or by cycling the MLG. The investigation revealed that in both cases, the MLG stabilizer brace lock linkages were insufficiently greased and the lock linkage attachment bolts were over-torqued.

Failure to extend and down-lock the MLG could adversely affect the safe landing of the aeroplane.

This [TCCA] AD mandates the [detailed] inspection, rectification [and repair the clearance gap] as required, and lubrication of both MLG stabilizer brace lock link apex joints.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating it in Docket No.

FAA-2014-0188.

Relevant Service Information

Bombardier, Inc. has issued Service Bulletin 84-32-121, dated May 27, 2013. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Repair Approvals

In many FAA transport ADs, when the service information specifies to contact the manufacturer for further instructions if certain discrepancies are found, we typically include in the AD a requirement to accomplish the action using a method approved by either the FAA or the State of Design Authority (or its delegated agent).

We have recently been notified that certain laws in other countries do not allow such delegation of authority, but some countries do recognize design approval organizations. In addition, we have become aware that some U.S. operators have used repair instructions that were previously approved by a State of Design Authority or a Design Approval Holder (DAH) as a method of compliance with this provision in FAA ADs. Frequently, in these cases, the previously approved repair instructions come from the airplane structural repair manual or the DAH repair approval statements that were not specifically developed to address the unsafe condition corrected by the AD. Using repair instructions that were not specifically approved for a particular AD creates the potential for doing repairs that were not developed to address the unsafe condition identified by the MCAI

AD, the FAA AD, or the applicable service information, which could result in the unsafe condition not being fully corrected.

To prevent the use of repairs that were not specifically developed to correct the unsafe condition, certain requirements of this proposed AD would require that the repair approval specifically refer to the FAA AD. This change is intended to clarify the method of compliance and to provide operators with better visibility of repairs that are specifically developed and approved to correct the unsafe condition. In addition, we use the phrase “its delegated agent, or the DAH with State of Design Authority design organization approval, as applicable” in this proposed AD to refer to a DAH authorized to approve certain required repairs for this proposed AD.

Costs of Compliance

We estimate that this proposed AD affects 75 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection and Lubrication	\$3 work-hours X \$85 per hour = \$255	\$0	\$255	\$19,125

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Amend § 39.13 by adding the following new airworthiness directive (AD):

Bombardier, Inc.: Docket No. FAA-2014-0188; Directorate Identifier 2013-NM-157-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401 and -402 airplanes, certificated in any category, serial numbers 4001 through 4454 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 32; Main Landing Gear.

(e) Reason

This AD was prompted by reports of two in-service incidents where one side of the main landing gear (MLG) did not achieve down-lock. We are issuing this AD to detect and correct insufficiently greased stabilizer brace lock linkage of the MLG and over-torqued lock linkage attachment bolts, which could lead to the failure to extend and down-lock the MLG, and could affect the safe landing of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection

Within 1,000 flight hours or 6 months after the effective date of this AD, whichever occurs first: Do a detailed inspection of the apex joints of the stabilizer brace lock link in the main landing gear (MLG) for clearance, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-121, dated May 27, 2013.

(1) If the clearance gap is 0.001 inches (0.025 millimeters) or greater, do the action in paragraph (h) of this AD at the time specified in paragraph (h) of this AD.

(2) If the clearance gap is less than 0.001 inches (0.025 millimeters), before further flight, rectify the clearance gap, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-121, dated May 27, 2013; and do the action in paragraph (h) of this AD at the time specified in paragraph (h) of this AD. If the clearance gap cannot be rectified in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-121, dated May 27, 2013: Before further flight, repair using a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent, or the Design Approval Holder with TCCA's design organization approval, as applicable). For a repair method to be approved, the repair approval must specifically refer to this AD. After the repair is done, do the action in paragraph (h) of this AD at the time specified in paragraph (h) of this AD.

Note 1 to paragraphs (g) and (h) of this AD: Completion of the actions in this AD does not affect the actions specified in the existing maintenance review board (MRB) task number 320001-201.

(h) Lubrication

Within 1,000 flight hours or 6 months after the effective date of this AD, whichever occurs first: Lubricate the apex joints of the stabilizer brace lock link in the MLG, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-121, dated May 27, 2013.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or the DAH with a State of Design Authority's design organization approval, as applicable). You are required to ensure the product is airworthy before it is returned to service.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-19, dated July 31, 2013, for related information. This

MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov>.

This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov>

by searching for and locating it in Docket No. FAA-2014-0188.

(2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on March 28, 2014.

Jeffrey E. Duven,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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